

# INDUSTRIAL WORLD

AND NATIONAL ECONOMIST.

DEVOTED TO HOME INDUSTRIES, SCIENCE, COMMERCE, FINANCE, INSURANCE, RAILROADS AND MINING.

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**Industrial World**

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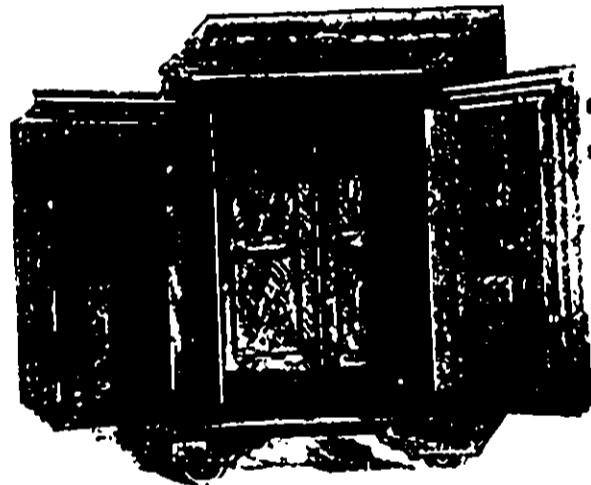
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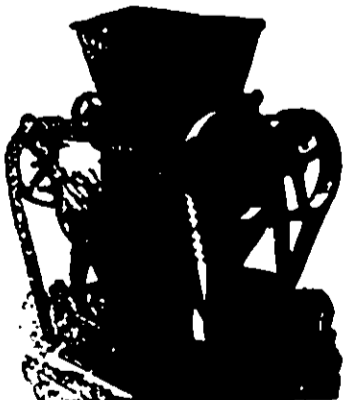
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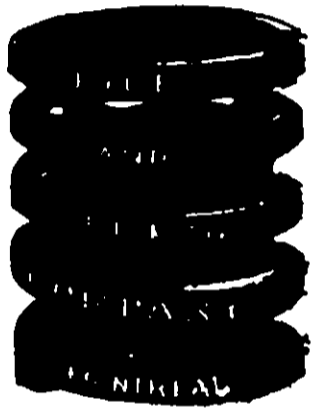
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HOW PROTECTION PROTECTS.

How any country can continue, and even in some lines increase, its importation of foreign goods, while protecting its own manufactures, is a standing puzzle to Free Traders. That this thing has actually occurred is matter of history, and not to be denied, we have seen it in the importation of British merchandise into the United States under the Morrill tariff, and we are seeing it in Canada to-day under the National Policy. The fact is beyond all question, but the Free Trade theory wholly fails to account for it; a good reason for at least doubting the truth of the theory. But does the theory of Protection explain what the other theory fails to do? Does the former any more than the latter help us to see through the puzzle? We hold that it does, and propose to give reasons. On the Free Trade side the difficulty is generally stated in this way: If Protection excludes foreign goods, then foreign trade is destroyed, and the country so situated drops out of the list of commercial countries. If on the other hand foreign trade continues, then the coming in of goods from abroad shows that the object aimed at has not been achieved, that in fact Protection has failed to protect. One source of the error here involved lies in the old logical fallacy of confounding together statements in general and statements in particular, and drawing conclusions which may be sustained by the one but not by the other. When we are told that Protection has failed to protect, because foreign goods still continue to be imported, we must come down to particulars, and demand, "what foreign goods precisely—the kind of goods we make at home, or the kind we do not make?" As soon as this particular inquiry is pressed, the weakness of the Free Traders' general conclusion begins to appear. Instances are at hand, and can be given. The French tariff, unfavourable as it has been to England, even with the Cobden Treaty in force, still allowed a considerable importation of English goods. It is true that during a series of years the amount of French merchandise brought into England has vastly exceeded the amount of English merchandise brought into France; but still English goods did to a considerable extent find a market in France, after all. When, however, we inquire what kind of goods, the operation of French Protection is seen. In metal goods, but especially in heavy iron for railway and other purposes, England has exported largely to France, England's enormous production in this line giving her an advantage that the French tariff could only partially overcome. But far different has been the experience in the various lines of textile fabrics. During years past the importation of French textiles into England has greatly increased, while the importation of English textiles into France has conspicuously fallen off. For iron production, in proportion to population, France is not so well situated as some other countries. But in the production of textile fabrics—silk, woollen and cotton—France has "gone in to win," with Protection to help; and that she has won immensely in the race with England in those lines the trade returns of recent years incontrovertibly prove. Again, there is a large importation of English cotton goods into the United States, in spite of duties on cotton goods averaging about forty-five or fifty per cent. But when we ascertain what kinds of cotton goods exactly, the seeming mystery is explained. Fine cotton goods—muslins, net, and fancy fabrics—are imported from England, just because in the United States the manufacture of such goods has scarcely yet been attempted. But heavy wearing cottons, such as are turned out in immense quantities at Lowell, Fall River, and other centres of the cotton manufacture, are emphatically not imported from England, or any other country; Protection having so perfectly and expanded this particular class of manufactures as to render the country wholly independent of supplies from any foreign quarter whatever. Turning to the iron trades we find that while importations of cheap, heavy iron still continue, with a ship's cargo of rails now used then, the importation of English tools and general hardware has been rapidly declining, that it appears on the way to total extinction, in fact. In Canada, again, certain lines of home manufacture, in iron, cotton and woollen

goods, are under the new tariff rapidly supplanting imported goods of the same classes respectively. The imported goods thus being superseded are far more American than English, as it is observed, for the simple and eminent reason that Canadian manufactures are in a general way like those of the United States, but unlike those of England. Protection does protect, to a certainty, in all those lines of manufacture which are really suitable to the country, and upon which we have entered in earnest. But other classes of goods—those upon the manufacture of which we have scarcely entered at all, or even contemplated as a present possibility—we continue to import as before. Nay, we may be importing such goods even more largely than in the years immediately preceding 1870, simply because of the larger demand which increased prosperity brings. Further, the increased lum of the workshops may have caused, and doubtless has caused, a larger importation of such machinery as we do not make at home, also of many articles, partly manufactured, which are the raw materials of various Canadian industries. Take the case of a manufacturer whose business is all at once greatly increased by the National Policy. The very first effect of the change may be to compel him to import more machinery and raw material, and even more American coal, in order to meet as quickly as possible the new demand and the pouring in of orders. But it would be a very lame conclusion to argue from this that the National Policy had failed of its object with the plain result of an actual large increase of home manufacture staring us in the face. We have seen even an increased importation of coal with a duty on the article, but why? Simply because of the suddenly increased demand, which Nova Scotia could not possibly on the instant supply, due to the increased consumption of coal in many and various home manufactures. A fundamental error on the Free Trade side lies in looking upon Protection as intended to have, and actually having, the effect of substituting industries unsuitable to a country for those that are suitable to it. In Canada, so it is said, its effect is to draw labour and capital away from the soil and into manufactures. This is an utterly wrong and mistaken view, far, very far away from the facts. What Protection does—what it is now doing for Canada—is not to substitute manufactures for agriculture, pulling down the latter to set up the former, but the addition of manufactures to agriculture. To our former production from the farm we are now adding a new production from the factory; the production from the farm still going on as before, nay, even increasing. Let the Free Traders show a single instance where the increase of manufactures, through Protection, has caused or even seemed to cause a decrease of production from the soil. Under Protection we add the new to our resources, while holding the old all the same; and this is the secret of our better ability to pay for such foreign goods as we want, while still our home manufactures are expanding.

TELEGRAPHS AND RAILWAYS.

Within the past few weeks a plan, which had been maturing for a year or so, for securing the control of the Canadian telegraph system by Americans has been carried into successful operation. The question which naturally arises is, What will be the consequence? True, we are on the most friendly relations with our neighbours. No trouble is on the tapis, and there is no immediate prospect of such, as far as the people of Canada are concerned. Should any unforeseen circumstances arise requiring the control of the telegraphic system, in what position would we be placed? As we remarked some time ago, when the scheme for the leasing of the Montreal line was about consummated, it is desirable, for many reasons, that Canada should control a telegraphic system of her own. Of course the right of the stockholders of the Montreal line to vote for amalgamation was a question which they had an exclusive right to decide for themselves, and we have already published an elaborate statement containing a defence from the standpoint of their interests. Still, it is a fact which many persons do not care to contemplate that the control of the telegraphic system of this country is now in the hands of Americans. Not alone in telegraphic

matters is the desire of our neighbours to secure a footing in Canada noticeable. A new railway move has taken place, while Mr. Hickson, General Manager of the Grand Trunk Railway in England for the purpose of negotiating a loan for a double track for the through trade of the Grand Trunk. At a meeting called a few days ago by the stockholders of the Toronto, Grey and Bruce Railway the information was suddenly sprung that certain Americans had secured sufficient stock of the Toronto, Grey and Bruce Railway to control it, thus preventing the possibility of its being acquired by the Grand Trunk. Some will see in this move the quiet but determined operation of the railway king Vauxhall. He controls the Canada Southern, which has amalgamated with the Great Western, and is at present playing his cards to secure the Credit Valley Railway. From these facts it is quite evident that if we wish, in the development of our country, to hold the power in our hands we will require to be very active and energetic. The railway chess-board of the Dominion is now closely watched at every move by great capitalists. It is a well-known fact that we possess the great wheat producing centre of the world in the North-West, and the grain transit of the future will be of vast importance. Hence the chief reason for our neighbours watching with intense interest the question as to who are to be the carriers of that trade. With our railways and our telegraphs thus subject to monetary manipulation, our Dominion certainly has cause for great watchfulness.

INFORMATION ABOUT CANADA.

The Rev. Dr. McCulloch, who is one of the travelling companions of the Governor-General in the North-West, is contributing a series of interesting letters to the Edinburgh Courier descriptive of his journeyings. The letter which appears in the Courier of September 2nd reports the progress of the party as far as Rapid City. We notice that the correspondence of the Times and Daily Telegraph is copied into provincial journals. The dissemination of information respecting the North-West in this way will be highly beneficial to our country, and there is every reason to believe it will be productive of emigration of fairly well off persons belonging to the industrial classes in the United Kingdom. What Canada is chiefly in need of is population, and we know of no better means of encouraging emigration to those portions of the country at present unoccupied than the circulation of authentic information that can be relied upon by those desirous of seeking a home in a distant land. While any action taken in that direction by the Government cannot fail to be productive of some desirable results, the representations of disinterested persons having no object to serve but the circulation of knowledge on the subject will be received with more confidence. And such being the fact we hail with pleasure any effort made by those whom we may designate outsiders to throw light upon the extent and resources of Canada's great territory in the North-West and its adaptability for the settlement of the British farmer, no matter what part of the United Kingdom he may come from. When reference is made to the subject of emigration to Canada and the United States respectively, many absurd statements are often made in this country by those who seldom lose the opportunity of advertising our neighbour's territory at the expense of our own. Because the number of persons who annually leave Europe for Canada is many times smaller than the number who leave for the United States, the fact is taken advantage of to cry down Canada, and to point out what are represented as the superior inducements offered across the water. Those who pursue this impudently ignore the fact that the United States has had a long start ahead of Canada; that for many years that country has had millions of acres of fertile territory ready for the occupancy of the agricultural immigrant from Europe, that the agents of her railway companies have acted in conjunction with the Government in circulating pamphlets containing glowing accounts of the fertility of the soil of the great regions of the west; while, on the other hand, Canada's acquisition of a vast territory of infinite resources was of comparatively recent date, a territory

only beginning to be known to the outside world. For years the great west of the United States has been prominently before the old world. A vast railway system unites the entire country, so that one can travel continuously from the Atlantic to the Pacific seaboard, immigrants have followed the tracks of the "iron-horse," and along the route from the western boundaries of Michigan to the extremities of California they are to be found in thousands comfortably settled in their new homes, and adding by their industry to the material wealth of the nation whose subjects they have become. The case of Canada has been different. But a change has set in and now that our rulers are in a position to fix the settlement of immigrants upon the soil at their disposal in the North-West our recently acquired territory bids fair to be a formidable rival to the much talked-of Western States. Already considerable progress has been made. Where a few years ago there was no population save the officials of the Hudson Bay Company and a small number of aborigines, there exists the flourishing capital of a new province, new towns are springing up in every direction, railway construction is making satisfactory progress, and immigrants are arriving from the older provinces and from across the Atlantic. We have great faith in the future of the North-West, regarding which at the present time comparatively little is known outside our own country, and even here few people have any conception of its great value as a portion of the Dominion. The publication of such letters as those of Dr. McCulloch and the impressions formed by other old world visitors will do much towards giving light in quarters where there now exists darkness, and will result in drawing attention to Canada as a desirable home for those not satisfied with their present condition.

THE UNITED STATES TARIFF.

Two tariff agitation are going on in the United States—one in favour of the abolition of Protection, the other in favour of such a revision of the tariff as will strip it of some of its incongruities while preserving its protective features. The opponents of Protection are greatly in the minority, and although they like our own Free Traders in Canada, talk of making Free Trade a party cry during the next election contest, their prospects are not particularly bright. The policy at present in operation in the United States has been of incalculable benefit to the country at large, and under present circumstances it is not likely to be abandoned for many years to come. While Protection is gaining ground in Europe, our shrewd and far-seeing neighbours will not adopt Free Trade. They are altogether too keen observers of the signs of the times to commit such a national blunder. The tariff revision movement, however, commands itself to the advocates of the United States "National Policy," and it is steadily gaining strength. Commenting upon this movement the New York Daily Indicator says:—"A tariff for revenue and the gradual reduction of the national debt must at least be maintained. Absolute Free Trade is utterly out of the question, even admitting that such a policy would be beneficial to the country at large. If the present tariff is faulty, as no doubt it is, its proper revision can only be effected through patient investigation and discussion by those having the special knowledge and experience requisite for the proper and intelligent performance of such a task, and this will necessarily take time. The crudities and inconsistencies of the present tariff are admitted to have been the result in a great measure of enforced haste as well as a want of knowledge by those who constructed it; therefore, to proceed in the same manner with its revision would be only to repeat the errors which have given us the present faulty instrument. But this appears to be the very thing the Free Traders are determined to have done, judging from the unanimity with which the journals in their liberal opinion and cry down the proposed commission on revision, yet it must be admitted that though a properly qualified commission is the only way in which the work of intelligent revision can be approached with any hope of improvement. The Philadelphia Record says: 'The popular demand outside the special benefits of the high tariff system is for a lessening of the burdens which that system has upon the general mass of citizens. A mere paring down of exorbitances, and an adjustment of certain contradictions and inconsistencies, so as to make the existing plan less crude and more symmetrical, will do it.'"

mand in that direction—no such revision, for instance, as are afforded in England, the present time of a popular desire to turn to a protective policy—for, despite, as they say, 'fair trade' means either more or less than Protection to home industries. A popular desire for Free Trade would find expression in mass meetings, elections, or as a party cry prior to these ways. The conclusion is warranted that the demand for Free Trade has no greater claims to being considered 'popular' than the demands of the bourgeoisie or the greenbackers, or of any other small but noisy clique who agitate so wildly and heretical notions in economic and political.

BRITISH BOARD OF TRADE RETURNS.

London papers received by the mail contain elaborate statements of the British Board of Trade returns for the last month. From a return before we learn that they show that the total declared value of the imports during the month was 35,091,098, which is an increase of 1,072,011 compared with the imports of the corresponding month last year. When compared with the imports of August, 1870, there appears an increase of 4,350,087. The imports for the last eight months amounted to 267,530,018, which shows a decrease compared with the imports during the first eight months of last year of 11,774,417, but an increase of 32,033,214 if the comparison be extended to 1870. The exports amounted in value during the month to 31,180,005, an increase of 2,000,280 compared with August 1880 and of 3,844,387 compared with August 1870. A comparison of the last eight months—during which the exports amounted to 150,919,095—with the corresponding period of 1880 shows an increase in the value of exports of 3,900,402, and compared with 1870 of 28,245,180. The returns respecting the export of iron and steel show a total value for the eight months ending with August of 17,600,247, which is a decrease compared with the same period of last year of 2,440,385, but an increase compared with the eight months of 1870 of 5,736,107. The returns for the month of August, in which month the exports amounted to 2,482,000, show an increase of 276,342 compared with August 1880 but an increase of 783,000 compared with August, 1870. The total value of the cotton manufactures exported in August this year was declared at 6,073,617, which shows a decrease upon last year of 108,017, but an increase of 1,020,135 compared with 1870. A comparison of the eight months (with exports during that period of this year 43,605,183) shows an increase of 1,100,000 upon last year, and of 10,413,310 upon the year before. In wool manufactures there is a total value shown for last month of 1,942,240—a decrease of 129,245 upon the exports of August 1880, but an increase of 370,331 compared with the exports of August 1870. In the last eight months the exports amounted to 12,015,000—an increase of 50,300 compared with the eight months of last year, and an increase of 1,570,000 compared with the corresponding period of 1870.

A correspondent of the Standard writes: "As a sort of experiment on an engine water supply pipe that had become choked up with incrustation after hammering it for an hour or two and kindling a fire all over it, without any result, one end was chipped up, and about a pint of refined oil was poured in the other end—all would hold—leaving it stand all night. The next morning the water was about a solid line over. Before trying this we thought of throwing the pipe away as useless, and getting a new one."

EDITORIAL COMMENTS.

The Pullman Car Company seems to be in a flourishing condition. The reports of the company for the year ending July last reached the large sum of \$2,074,988. The expenditure, including \$252,100 for dividends, amounted to \$2,024,112, leaving a surplus of \$50,876. The company now owns 31,077 cars.

The death of President Garfield has called forth an expression of general regret throughout Canada all classes of the people joining in it. In England, too, feeling on the subject is very strong. Reading newspapers appeared yesterday & yesterday, flags flew at half mast from public buildings, and in other ways there was visible evidence of the sorrow which is felt at the melancholy termination of President Garfield's career. Yesterday morning the Queen telegraphed to Mrs. Garfield, stating that words could not express the deep sympathy she felt for her in her affliction. A despatch was received from the Lord Mayor on behalf of the citizens of London, expressing regret at the sad loss sustained by the American nation. Indeed, from all parts of the civilized world messages of condolence arrived after the announcement of the President's death. It is seldom that a public event has occurred that has called forth such general sorrow as, in the first place, the attempt upon President Garfield's life, and, in the second, its fatal result.

SPECIAL NOTICES.

W.M. NORRIS & SON.

ORDER OF PIANO, ORGANS AND PIANO COVERS, AND MANUFACTURERS OF PIANO STOOLS.

This firm is one of the oldest in Canada, having been established for the past twenty-five years, and are doing a remarkably thriving trade. In piano stools and covers they are doing an immense wholesale trade, and are exclusively supplying the trade from Gaspé to British Columbia. Owing to the immense supply of piano stools which they send through the country, and the material economized bestowed on them by an appreciative public, they are contemplating to withdraw from the piano trade and devote their extra attention to the manufacture of piano stools, which are unsurpassed in design, style and finish. The warehouses and office of this firm are at No. 3 Adelaide street East, Toronto.

TODHUNTER, MITCHELL & CO'S CELEBRATED COCOA AND CHOCOLATE PREPARATIONS.

It is well known that owing to the extremes of heat and cold in our Canadian climate something is needed to build up our constitutions, and the excellent preparation of cocoa and chocolate manufactured by Todhunter, Mitchell & Co. seems to supply the want. Persons of sedentary habits who do a vast amount of brain work will find the brain invigorated by this chocolate and the nerves tended to induce a quiet sleep. Ladies will find by its use a transformation from sickly, mallow complexions to that of the bloom of health, and for children also it is the best drink, as it contains the highest amount of nourishment in the most digestible form. As cocoa contains the sustaining qualities of tea and coffee, without their hurtful properties, farmers and mechanics who are overtaxed with manual work will find it invaluable. Todhunter, Mitchell & Co.'s cocoa and chocolates are entirely free from the liability to become stale and unpalatable. Although, in accordance with the Adulteration of Food Act of 1875, chemical analysis has been frequently made of cocoa and chocolate, yet in every instance, Todhunter & Mitchell's improved system of manufacture has been reported entirely free from any deleterious substances, and of fine quality. Owing to a variety of causes all previous attempts to make the manufacture of cocoa and chocolate a special industry in Canada has resulted in failure. It has, however, been the good fortune of Todhunter, Mitchell & Co to successfully demonstrate the fact that as fine goods can be made here as in any part of the civilized world, and to their increasing determination to maintain a high standard of excellence is attributed the great and constantly increasing demand for their cocoa and chocolate. Their works are located at 112 Adelaide Street East, Toronto, and a short description may be had as follows: An immense engine and boiler in the basement supply the power for turning the various machines in the three upper flats. The third floor is used for storing the various kinds of cocoa beans imported from the West Indies, Mexico and South America, and here they are roasted to develop the aroma, in patent cylinders, and of twice calculated previous to being lowered to the ground floor when the numerous

and expensive machines used in roasting, uniting, sorting, and packing cocoa and chocolate are kept constantly running. The goods when prepared are packed in the second story where they are packed, labelled and stored ready for transport.

HAPPY SETTLEMENTS IN MICHIGAN.

There is an entirely new mode of establishing their headquarters in Toronto. It is used for laundry purposes in public institutions, laundries and private houses instead of lye and aqua blue and is universally acknowledged to be superior to all former kinds of blue as it will not spot, streak or dye the finest fabric, white require washing and bleaching. This blue is an improvement on the old system of using blue bags, as none are required when Harper's Liquid Blue is used, a single drop colours a large goblet of water three will make it a dark blue. The manufacturer of this blue makes a very creditable display in the main building of about fifty dozen of his liquid blue. This blue factory is entirely new and the only industry of the kind in the Dominion. Considering the manufacturer has only been in operation since the third of July 1881, he has experienced a good demand for his product, and hopes yet to have a large show of the public patronage of our fair Dominion, trusting to the public, by means of the Press and individual attention, to secure that patronage which the venture of the manufacturer deserves. We are pleased indeed to state that he has received the highest award at the Industrial Exhibition, Toronto, 1881, against the world Mr. M. A. Harper, 20 Francis street Toronto, is the manufacturer of this blue, and deserves credit for his display, as we think it eclipsed any exhibit of one article at the World's Fair, Toronto, 1881.

DEVASTATED MICHIGAN.

The recent terrible forest fires in eastern Michigan revive memories of that terrible day in October, 1871, when not only Chicago, but as well several sections of the lumber district of the North-West, were devastated by the destroyer. Among the sections of country which at that time were visited with swift destruction was the same district which now claims again the sympathies of the civilized world, by reason of the terrible suffering and loss of life resulting in a culmination of the causes which were then established.

Those familiar with the map of Michigan will recognize the devastated district as what is not infrequently spoken of as the "thumb" of the state. It is that country lying north of the line of the Detroit & Bay City railway, from its junction at Lapeer with the Grand Trunk road to Port Huron. While Chicago was in flames on October the 9, 1871, this same territory was being swept by fire, as a result of which thousands were rendered homeless, while hundreds of dead bodies testified to the ruthless character of their disastrous experience, and their helplessness of endeavour to escape from the sea of flame. The loss of life at that time was never fully ascertained, and, indeed, it is but a few weeks since it was reported that the remains of four human skeletons, huddled in a group, which were supposed to be those of a family who perished in the great fire of ten years ago, now, for the first time, discovered.

The region of country so terribly afflicted was the field of the earliest endeavours of the lumberman in the state of Michigan. On the banks of the Black River, and other minor streams emptying into the St. Clair river, were watered that large stock of logs which for many years supplied the mills of Port Huron, St. Clair, Detroit and other river points. Later, the attentions of the lumbermen were attracted to the Cass and Flint rivers, whose waters leading in the region which would naturally be explored by the loggers operating on the streams flowing east were found not only eminently suited to log running, but seemed a provision of nature for enabling immense forests of the most valuable pine timber which had, up to that time, or, in fact, has since been discovered upon the continent of America, to be utilized for the benefit of a rapidly developing nation.

The Cass river pine, and scarcely less that of the Flint, became so famous throughout the country that it was no uncommon occurrence in the East to see a lumber yard sign, or a newspaper announcement by some enterprising dealer, read, "Cass river pine lumber for sale." At the time of the great fire of 1871, lumber operations upon these streams had been carried to their very sources, and the near at hand timber had been pretty thoroughly taken off, after the manner current in those days, in which no timber was thought fit to cut that would not yield largely the upper qualities, or that was not over twelve inches in diameter. There was still remaining a vast quantity of small timber, not remote from the streams, a considerable quantity of larger growth.

The country had not by any means ceased to present an inviting field for the lumberman, and abounded with tracks of good hardwood with hemlock and cedar swamps, which were not as yet considered of value. Along the coast of Lake Huron, the mills of Port Austin—producing from 10,000,000 to 12,000,000 feet per year—constituted about the last of the chain of mills which had for years invited the lumber buyer to Lexington, Port Hope and other

ports town West of Port Arthur. Beyond the coast shore of Kenawabaw Bay, however, with a good deal of work on the timber which was still to be had on the Grand River, Selawick, a certain settlement was situated in the year 1871, for the purpose of a few years' storage, in which a number of the prospering and skilled pine sawing and country boys had most excellent employment. Over a large proportion of all this territory was scattered farms, some of which were cleared by the lumbermen in order to establish food supplies of fruits, hay and vegetables for their winter operation.

Those who are familiar with the lumbering business need not be told as to the character of a large proportion of the settlers when they will recognize, as among the labourers in the lumber camps, who had settled upon cut lands, taken up homesteads or purchased swamp lands, the same in a neighbourhood where work was to be obtained in the pine woods during the winter, enabling them to obtain ready money for necessities until available without, and to take out the winter means available from the products of farms in process of clearing. But few in all this region of country could boast, at the end of each successive year, of available results of their labours, beyond an increase of the area of cleared land, and an increase in the months to be provided for villages and hamlets were springing up in all directions as the farming communities would demand, but none possessing any greater elements of wealth than were presented in the enterprise of small traders, and such mechanics as were in demand in a new country.

It was over this country that the flames swept upon the fatal October days of 1871, leaving ruin and devastation in their track. The standing timber was killed over vast areas of country, and lumber operations were almost wholly suspended. After the first season, by reason of the valuelessness of the timber. Thousands of small farms were at that time swept of all their buildings and fences, as well as the crops which had been raised during the season. Hundreds of families were called to mourn the loss of some of their members, and in scores of instances whole families perished in a body. The sympathies of the world were awakened by the dire results of those days of terror in Michigan and at Frankfort, Wis., but above and overshadowing all, by those at the better known and more recently located city of Chicago. Relief was freely forwarded from all quarters, but the scattered settlements of the stricken farming and lumber districts received, comparatively speaking, only the crumbs which fell from the richer supplies of bounty which were lavished upon the sufferers of Chicago. It is said that at the time of the Irish famine of 1845 the Prince of Wales, then a small lad, had been listening to the tales of suffering and starvation, when he turned to the Queen mother with the remark, "Well, I would not starve if I were there. I would live on crackers and cheese first." And not a few of the sufferers in Michigan would have been glad of such a diet.

Such aid as Port Huron, Detroit, the Saginaw valley and southern Michigan, supplemented by supplies principally of second hand clothing, from other sections as could be made available, were distributed among the settlers, and with the lapse of years the experiences of those terrible days became a memory of the past, to be recalled only with a shudder, accompanied with the earnest prayer that such a calamity might never again be visited upon any portion of the land.

The country has again been settled by a quarter of a million souls, scattered over 6,000 square miles. The timber killed by the forest fire of 1871 has stood in vast areas of this territory, the whitened trunks pointing upward, and drying to the heart. In the midst, clearings have marked the path of new settlers that the walls of tinder wood which surround them would never again take fire, until the financial ability of the people should enable their permanent removal. Many express surprise that the people in the burned district did not, after their first disastrous experience, remove the dead timber which could, and did, prove a constant menace to their safety. These do not appreciate the extent of country involved, the comparative sparseness of its population, or the poverty of a majority of those who go into the timber wilds to bow out a home for themselves and their families—facts which at once forbid a man struggling for a poor existence from undertaking works of a public character, for the general benefit especially where the work is to be performed upon the lands of another, who perhaps, is a non-resident, and who, if approachable, would probably not appreciate the danger with which an entire community was menaced by the condition of his property.

The present improved timber depots have lost a well calculated resource the last voyage of dampness from the dead timber of this last section of country and what wonder that again the flames have obtained a foothold in the dry trunks of the miles of forest trees, and that the sympathies of the world are awakened for thousands of naked, hungry and homeless sufferers, including the survivors of those families from among whom hundreds of victims have fallen in the holocaust of flame, and, destitute and discouraged, a vast population looks upon the ruins of their lately comfortable dwellings and farms, despondently contemplating the coming of a winter season, which can, at the best,

present to them and with only an outlook of darkness, with long and separation of families. The amount of suffering and trouble upon the people and the number of families of supplicants to their more favoured fellow citizens, and their appeal for aid should not fall upon the heart of any unappreciative man.

Could the money of each of the sufferers be at once replaced from the bounty of the world there would still remain an untold and unexpressed amount of suffering which money cannot replace or compensate. Five thousand families might again be provided with houses, fuel, and provisions, but the hundreds of lives which have been sacrificed can never be replaced. Only time can replace the orchards destroyed, or rebuild the fences and farm buildings. The horses, cattle, fowls, comfort, which have been destroyed may not all be replaced in a day, and in many instances can never be fully substituted. Still it is in the power of sympathizing people to relieve a vast amount of distress, and to this end, no doubt, the call for aid will meet with a hearty response. If this should come at once, much can yet be done toward relieving the distress which the near approach of winter makes inevitable. Hundreds of families must be aided through the entire winter, and until the crops of another season shall enable them again to rely upon their own endeavours. With everything they possess swept from them, hundreds of those who are the heads of families will seek a winter's work in the pine woods, supporting their absent families, dwelling meanwhile in temporary habitations, to the extent of their comparatively small earnings. Such should receive the utmost consideration of employers, not only in providing them with work, but also in the prompt payment of their earnings, while at the best the absent families will inevitably be deprived of the comforts upon which they had confidently relied, during a cold winter. The lumbermen of the country will, no doubt, feel it a pleasure to aid the sufferers, and those of Chicago have already responded in a measure to the cry for immediate aid.—North-Western Lumberman.

THE TRADE QUESTION IN ENGLAND.

(Edinburgh Courier.)

The manner in which the question of Free Trade is being treated shows clearly that the thing called Liberalism is consistent only in its inconsistency. It claims to represent all that is implied by progress, the redress of grievances, and the adaptation of everything to the Constitution to the circumstances of the times. In regard to many things it certainly is identical with change—mischievous and unnecessary change, but with respect to this particular matter, it not absolutely retrogressive, it assuredly displays the most pertinacious obstinacy towards the suggestion of any modification in the commercial laws which were deemed most advantageous some forty years ago. About that period a body of gentlemen, now known to fame as the Manchester School, decided that the prosperity of this country could best be promoted by throwing open its ports to foreign merchandise and foreign manufactures. There need be no hesitation in confessing that for a considerable period a result, so far as the mere amount of trade transacted is concerned, was all that had been predicted. But everybody knew that a period of prosperity must follow such a change, and it was only far-seeing statesmen like Lord Beaconsfield who perceived that a time would come when the then agitating masses would plead for a reversal of the policy of free trade. It was only men possessed of his courage and patriotism who ventured to declare in the face of an overwhelming majority that such would be the issue. The present circumstances of the country in relation to commerce are a sufficient commentary on that prophecy. We have not yet quite reached the stage for testing the matter, but the most unending apostles of Cobden and Bright are conscious of the fact that it is rapidly ripening. They have no arguments to offer; they are unable to show by statistics, or by reference to the condolence, commercially, of the community at the present moment, that Free Trade is still a boon to us. They cannot even convince themselves that it is not occasioning the loss of many millions per annum. Instead, however, of admitting that they were mistaken as to the ultimate result, they content themselves with abusing those whose eyes have been opened to the situation, and who recognize in it the necessity for a change.

When Lord Beaconsfield prophesied as above, Mr. Cobden and his friends informed all whom it might concern that ten years later Free Trade would become universal among the civilized nations of the earth. Shortly afterwards the present Premier hazarded his reputation for prescience and foresight on the assertion that in a much more limited space of time this result would be produced. What of that prophecy now? Instead of veering towards Free Trade, every nation with whom we have commercial relations is bedding itself round year by year with a more rigidly prohibitory import tariff. This is a fact which cannot be got over by the most elaborate use of statistics and polemics. It is not in the slightest degree affected by calling ugly names and hurrying uncomplimentary epithets at those who are in a position to realize and admit the circumstances in which we are now placed. It has been said that such "must be possessed either of great courage or of intense stupidity." The courage to know and to declare the truth is oftentimes in these days a rare commodity. In this sense alone are the advocates of Free Trade courageous and their stupidity, if it exists at all, consists in the fact that they possess the courage. The sarcasm which is being persistently held up to the public gaze as Protection. This new thing called Free Trade, it is

maintained, is but Protection under a thin disguise. No doubt men are still living who remember the state of things prior to the adoption of Free Trade, and each of those who were then in favour of it, and who, so far, have experienced no personal disadvantage from it, will probably still be disposed to argue for its continuance if they did but argue there would be little difficulty in meeting them and convincing them. What is it that they tell us? They tell us that under Free Trade the manufacturers of this country have beaten the manufacturers of every other country in the world. The answer to this is that for a time our manufacturers were decidedly in the van of commerce, and that they are now, through the continued operation of the same principle which is said to have secured their supremacy, decidedly in the rear. Why is this so? Too other nations by whom our manufacturers are beaten have certainly not advanced in consequence of the adoption of Free Trade in their part. Is it not rather because they have strenuously adhered to a policy which gives their products a monopoly at home and the most equal terms abroad? At all events, it is surely worth while to consider how that while they have without exception advanced, we have of late years been receding. This is done by the Free Traders. The tell us that in ten years our foreign trade has increased 21 per cent, which is true. But the foreign trade of America in the same period has increased 67 per cent, and that of France 61 per cent.

When Free Trade was adopted in 1847 the contention was, firstly, that it would be an immediate and immense gain to the consumer in this country, on the principle of counting beads; and, secondly, that it would ultimately be a gain to the world at large, inasmuch as all other nations would follow suit. Upon this latter proposition the main justification for the step taken was confidently based. At the end of thirty-five years it is found that no such justification exists, and those who still adhere to Cobden tenets are driven to the humiliating position of arguing that "the total of the manufacturing production of this country is as great as it ever was." It is not now as great as it ever was, what would be the position of a community so vastly increased in numbers, and whose ideas as to what constitutes the necessities of life have undergone such a change? Forty years ago the exports of this country exceeded the imports in value to the extent of nearly fifty millions sterling. In 1871 the value of the imports surpassed that of the exports by 114 millions sterling. In other words, for each 5 per cent. increase on exports there has been an increase of something like 150 per cent. on imports. Those who maintain that the value of the country's exports is its imports, are thus faced with the logical dilemma, that under protection Great Britain had to give goods to the value of, say, 100 millions in value, and that foreign nations are now carrying in their trade with us under similar conditions. The facts which we have quoted go to show that such a conclusion is absurd. Without unduly emphasizing the progress which has been made in America, seeing that it is a new country with incalculable wealth and undeveloped resources, let us simply institute a comparison between ourselves and France. The difficulty of negotiating commercial relations with France has increased on each successive occasion, until at last it is confessed that treaty negotiations between the two countries have been abandoned. That they have been abandoned is in no sense due to any little which we possess to treat our nearest neighbour cavalierly. On the contrary, it is because the terms proposed to us have graduated from one stage of stringency to another, till at last they are deemed worse than no treaty at all. And why has France treated us in this high-handed manner? Because the trade of France has increased 61 per cent. during the time it has taken us to achieve a growth of 21 per cent. And whence the diversity of growth? France has had great wars, revolutions, changes of government, and general unrest. Such has not been our history. But the policy of the French Government has been to protect the French producer upon whom, it is held, depends the prosperity of the labouring classes and the nation generally—from undue competition from abroad. Free Trade, on the other hand, proceeds upon the assumption that the producer and the consumer are beings apart, having no interests in common, and no mutual advantages. Another evidence of the weakness of the case of the free traders is that they persist in saying something is proposed which actually is not proposed at all. "A protective duty upon corn" is not among the things suggested, but this is the skeleton in the Cobden cupboard, and this is the way in which the imaginary proposition is reasoned out; the effect being to increase the price of bread, the farmer would be enabled to pay a higher rent to his landlord. Would it not be an reasonable to say that the additional sum received in name of increase in the price of corn would enable the farmer to pay higher wages to his labourers, to purchase more freely of the commodities generally manufactured in the country, to keep the land under cultivation, and to maintain a position of solvency? But it is a gross and deliberate misrepresentation of facts to say that the advocates of Free Trade desire to return absolutely to protection. What they desire is, that the manufacturer, farmer, and producer generally in this country shall be enabled to compete upon equal terms with those of other nations in the markets of the world. It is no simple problem to solve, and we are far from saying that it is yet within appreciable distance of solution. Those, however, who think that it can ever be solved by means of a blind adherence to the principle of free imports, are at once possessed of "great courage and intense stupidity."

Winnipeg, Man., 21st.—Write have been issued for local elections in the electoral divisions in the newly acquired territory. The nominations take place on October 21st, and the polling on November 2nd.

SPiRiT OF THE COMMERCIAL AND INDUSTRIAL PRESS.

THE TWO PROTECTION AND PROSPERITY

Journal of Commerce

If there is one thing about which the Free Trade advocates are so fully agreed that they never differ, it is the doctrine that a protective tariff is hostile to national prosperity...

France has been somewhat of an extraordinary and applicable example of the protective principle. Not only were the duties levied upon imports...

The United States presents another example. For twenty successive years this country has been under the rule of the protective tariff system...

protection and that our prosperity increases with the increase in the degree of protection in the tariff.

If we turn to Canada, we see another illustration of the theory. Under a non-protective tariff there exists to March 17, 1875, industry was depressed, largely and dependent...

The first proponent of all protective commercial nations is the United Kingdom of Great Britain and Ireland. Production is piling up commodities which cannot be sold...

If we next turn to Japan, we shall see another illustration of the kind. Many years ago England got a treaty with that country by which it was provided that no duties whatever should be levied upon the imports of iron hardware...

EXPERTS AND ENGINEERS

Our readers may think from the tone of some of our recent articles that we have no faith in scientific attainments. That an expert is an impostor, the only valuable knowledge of any art being that derived from long years of practical work in the shop or at the desk...

the talent he has received a sharp pain from some medical student who has tried to find his head added to a hand to the side of his nose...

RAILWAY STATION ARCHITECTURE

(Railway Age)

The European visitor to this country will be compelled to admire the energy and industry displayed in all public works and particularly in the management and equipment of our railways...

STEAM ENGINES AND LUBRICANTS

(The Milling World)

The quality of the lubricants used on steam machinery should always be carefully looked after, especially that used on the cylinder and steam valves, and other moving parts that ought to be steam tight and kept so.

great station built by the Pittsburgh and Wayne & Erie company, and occupied not only by the numerous trains of that road but of four other great lines...

The great corporations combined certainly can well afford to supply the pull with macadam or with any accommodations, and this it will be conceded by all who enter the station...

The grand idea which such magnificent structures as these, voluntarily erected by railway companies for their passenger convey to the traveller is that he is not looked upon as a mere pile of merchandise to be thrown into a hole...

A FARMER ON PROTECTION

Hesperus, Ill., Aug. 2, 1885

To the Editor of the Chicago Herald: Occasionally one meets a farmer who is of the opinion that if the tariff were removed an enhanced price of farm products would ensue...

Again, another class of Free Trade asserts that in spite of a protective tariff our manufacturing interests were depressed from 1873 to 1879. But without the tariff would they ever get upon their feet again?

offer if possible, to see that they are all in line and well-attended and that the least of any where they are to this vital import matter...

Perhaps the most important fact in the steam engine is the governor. This is a valve, by its free and rapid action, which regulates the motion of the piston...

TORONTO PRICES CURRENT.

Table of Toronto prices for various commodities including Groceries, Hardware, and Drugs.

OILS

Table of oil prices including Imperial Gallons and other grades.

PAINTS ETC

Table of paint and other material prices.

WOOL

Table of wool prices for various grades.

HIDES AND SKINS

Table of hide and skin prices.

LEATHER

Table of leather prices for different types.

PRODUCE

Table of various produce prices.

GRAIN

Table of grain prices including wheat and barley.

PROVISIONS

Table of provision prices such as butter and cheese.

SALT, ETC.

Table of salt and other commodity prices.

BOOTS AND SHOES

Table of boot and shoe prices.

LIQUORS

Table of liquor prices including wine and spirits.

Private Country or City Dealers.

Table of prices for private country or city dealers.

IMPERIAL MEASURE

Table of imperial measure prices.

IRON

Table of iron prices for various grades.

STEEL

Table of steel prices.

DRUGS

Table of drug prices.

WEEKLY REVIEW.

Text discussing the Industrial Exhibition, stock market, and general economic conditions.

Text discussing the stock market, mentioning Dominion and Federal stocks.

Text discussing the stock market, mentioning Dominion and Federal stocks.

Text discussing the stock market, mentioning Dominion and Federal stocks.

Text discussing the stock market, mentioning Dominion and Federal stocks.

Text discussing the stock market, mentioning Dominion and Federal stocks.

Text discussing the stock market, mentioning Dominion and Federal stocks.

THE DEGENERATION OF STEEL

Text discussing the degeneration of steel and its impact on industry.

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Text discussing the degeneration of steel and its impact on industry.

Text discussing the degeneration of steel and its impact on industry.

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Experiments are being made by Clinton M. Ball...

Text describing experiments on heat and steam, mentioning Clinton M. Ball.

Text describing experiments on heat and steam, mentioning Clinton M. Ball.

Text describing experiments on heat and steam, mentioning Clinton M. Ball.

Text describing experiments on heat and steam, mentioning Clinton M. Ball.

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Advertisement for DUNGAS COTTON MILLS CO. DUNDAS, ONT. listing products like Grey Domestic, Ticking, Denims, etc.

Advertisement for THE WOOL HOUSE. WINANS & CO., 13 Church Street, Toronto. Listing wool products and machinery.



Watches, gold and silver. Welch & Co. Toronto \$1. ... Washers, mangle, Hamilton Industrial Works Co. Toronto \$1. ...

Blankets, white, heavy, 12 pairs. Cornwall Manufacturing Co. Toronto. ... Blankets, white, medium, 12 pairs. John Mcintosh & Son, Woodville, silver medal. ...

Gloves, mitts and mittens, wool assortment. Half dozen each. John Penman silver medal. ... Extra entries—John Penman, Paris, 1903, 1st prize and bronze medal. ...

Calisks, polished, 2 lbs. and over 1 dozen. Beardsmore & Co. Toronto, \$1. ... Saddle, an assortment, ladies', Lugzlin & Barnett, Toronto, bronze medal. ...

the wire in this instance being accidentally broken—the operator supposed the soil of water because was the next and most brilliant substitute. It is said that the inspector who made the discovery actually laughed, that wasn't it. ...

Class 65—Carriages, Buggies, Waggon, Sleighs, and material for same. Largest and best display of heavy work. Hutchinson & Huron, Toronto, silver medal. ...

Class 66—Knitting Woolen Goods (for wholesale trade only). Cardigan jackets, assortment, half dozen, both yarn and knitting of Canadian manufacture. John Penman, Paris, silver medal. ...

Class 67—Hosiery, Saddlery, Wagon Engines, Hoop, Trunkmakers Work, etc. Saddle, an assortment, ladies', Lugzlin & Barnett, Toronto, bronze medal. ...

Class 68—Bookbinding, Printing Paper, Penmanship, etc. Bookbinding (blank book), assortment of, Brown Bros., Toronto, \$6. 2nd, Davis & Henderson, Toronto, \$1. ...

TELEGRAPHIC REMINISCENCES. "Give you some reminiscences of a telegraph office? Yes, I will try." was the response of a gentleman, once a prominent telegrapher, and now engaged in another line of business in this city, to a Critzer reporter yesterday. ...

MONTREAL PRICES CURRENT.

Table of Montreal prices current, categorized by Groceries, Molasses, Fruit, Spices, Rice, Salt, Fish, Liquors, and other goods.

Table of Drugs and Chemicals, including various acids, oils, and medicinal products.

Table of Weekly Review, covering various commodities like iron, steel, and other industrial goods.

Textual report on market conditions, including sections on 'WEEKLY REVIEW', 'IRON AND HARDWARE', and 'DAIRY PRODUCTS'.

Textual report on market conditions, including sections on 'WEEKLY REVIEW', 'IRON AND HARDWARE', and 'DAIRY PRODUCTS'.



LUMBER TRADE.

EARLY SAW MILLS IN EUROPE.

A note to the *Times* of the 11th inst. says that the earliest date of the first process of sawing wood is not known. The earliest mills were driven by water wheels and wind mills. In the 11th century, the first water mill was built in France. In the 12th century, the first wind mill was built in the Netherlands. In the 13th century, the first saw mill was built in the Netherlands. In the 14th century, the first saw mill was built in the Netherlands. In the 15th century, the first saw mill was built in the Netherlands. In the 16th century, the first saw mill was built in the Netherlands. In the 17th century, the first saw mill was built in the Netherlands. In the 18th century, the first saw mill was built in the Netherlands. In the 19th century, the first saw mill was built in the Netherlands. In the 20th century, the first saw mill was built in the Netherlands.

EXHIBITIONS AND FAIRS.

Prescott, 21st.—The 20th annual exhibition of the South Grenville Agricultural Society opened yesterday with about 1,500 visitors. The food and grain show has never been surpassed here. The show of sheep, cattle and swine is large, and some of the animals are very fine. The show of horses is not so large as usual, but some fine animals are exhibited. The fruit show is excellent. In fancy goods, the display is smaller than in former years. On the second day the attendance was very large, the chief attraction being the horse race, for which the Morrisburg, Ogdensburg and Prescott companies were entered. The track was in poor condition, and the race was slow. Morrisburg won in 1 minute 13 seconds; Ogdensburg 1 minute 12 seconds; Prescott 1 minute 11 seconds. Prescott made a very bad showing, but made the best running time of the ground. Eventually protests were filed against Prescott and Ogdensburg for infringing the running rules, and both companies were ruled out, the first money being awarded to the Morrisburg company. The fair will be brought to a close tomorrow, a bicycle race being the chief attraction.

ment both as regards the number of entries and the nature of the exhibits. The show of horses will be very fine. The show of sheep, cattle and swine is large, and some of the animals are very fine. The show of horses is not so large as usual, but some fine animals are exhibited. The fruit show is excellent. In fancy goods, the display is smaller than in former years. On the second day the attendance was very large, the chief attraction being the horse race, for which the Morrisburg, Ogdensburg and Prescott companies were entered. The track was in poor condition, and the race was slow. Morrisburg won in 1 minute 13 seconds; Ogdensburg 1 minute 12 seconds; Prescott 1 minute 11 seconds. Prescott made a very bad showing, but made the best running time of the ground. Eventually protests were filed against Prescott and Ogdensburg for infringing the running rules, and both companies were ruled out, the first money being awarded to the Morrisburg company. The fair will be brought to a close tomorrow, a bicycle race being the chief attraction.

TWO TARIFF DEMONSTRATIONS.

The friends of tariff protection in the United States have determined to take the field boldly in favor of a revision of the tariff in the interest of American industry. The Free Traders have long found fault with the tariff, and have frequently sought to have it revised in the direction of lower duties, but their attempts have been frustrated in nearly every instance. The lapse of time, however, has shown Protectionists that there are in the present tariff egregious incongruities and inequalities of a totally different character from those which distress our opponents. These defects must be cured in order to permit all branches of American industry to develop harmoniously. Low duties must be raised, and protective duties must be maintained. There must be no taxation in the interest of Free Trade. Two national conventions will be held in November which will strongly endorse tariff revision by a civilian commission. One convention will be held in Chicago early in November under the auspices of the Industrial League of America—an organization of North-Western manufacturers. The other convention will be held in New York on a later day in November, not under the auspices of any industrial organization, but as a demonstration by representatives of agriculture, manufactures and commerce. These two conventions, though entirely independent of each other, will act in harmony on the great question of tariff revision in the interest of protection to American industry, and it is confidently anticipated that they will be so largely attended by representative men of such prominence in the nation and in the business world that the expression of their views will have great weight with Congress.

Agriculturists, manufacturers, workmen and others who sympathize with the purposes to be advocated by these conventions are invited to communicate with Mr. David H. Mason, corresponding secretary of The Industrial League of America, 162 Washington Street, Chicago, in regard to the Chicago convention, and with Mr. Marcus Hanson, care of The American Protective Union, 37 Broadway, New York, in regard to the New York convention. No one interested need wait to receive a formal invitation to attend the conventions, but should at once write to these gentlemen or either of them offering his co-operation. Manufacturing establishments and industrial organizations should by all means send a delegate to attend one or both of these important demonstrations.—*S. E. Chicago*

PRESIDENT ARTHUR.

The following is a sketch of the career of Mr. Arthur, who succeeds to the Presidency of the United States on the result of the death of President Garfield.—Chester A. Arthur is the seventh Vice-President elected from the State of New York. His predecessors were Aaron Burr, George Clinton, Daniel D. Tompkins, Martin Van Buren, Millard Fillmore and William A. Wheeler. Mr. Arthur was born in Franklin County, N. Y., October 5th, 1829. His father, the Rev. Dr. William Arthur, a Baptist clergyman, emigrated to the country from the County Antrim, Ireland, in his eighteenth year, and died October 27th, 1875, in Newtonville, near Albany. Dr. Arthur, from 1855 to 1863, was pastor of the Calvary Baptist Church of this city. He also filled the pulpits of Baptist Churches at Leanington, Honesburg, Fairfield and Winston in Vermont and New York, Perry, Greenwich, Schenectady, Lansingburg, Hoosic, West Troy and in this State. His family consisted of two sons, of whom Chester was the elder, and five daughters. Vice-President Arthur was educated at Union College, Schenectady, graduating in 1847. After leaving college he studied law, and was admitted to the bar in 1850. He came to this city after having taught school for two years in Vermont, and entered the law office of Erastus D. Culver. When the latter was made Judge of the Civil Court of Herkules, Mr. Arthur formed a partnership with his friend and room mate Henry D. Gardner. Upon the death of the latter in 1855, the business was conducted by Mr. Arthur alone until 1861, when the firm of Arthur, Phelps, Hartsell & Hanson was formed. After his admission to the bar Mr. Arthur married Elizabeth Lewis Herndon, a daughter of Lieut. Herndon, of the United States Navy. Lieut. Herndon was drowned in 1857 while commanding, by permission, the steamer *California*, on a law-boat line between New York and Chicago. He sank with his vessel. Mr. Arthur died in this city on January 15th, 1886, of pneumonia. Mr. Arthur gained prominence by appearing as attorney in the famous suit of Jonathan Lemmon, of Vir-

gins, to recover eight slaves who had been declared free by Judge Paine, of the Superior Court of this city. Lemmon was passing through the city with his slaves, intending to ship them to Texas when they were discovered and freed by order of Judge Paine, who decided that they could not be held under the fugitive slave law. The Attorney-General of the State, appointed Messrs E. D. Culver and Joseph Blunt as counsel to defend the suit, but they withdrew, and Mr. Arthur was appointed in their stead. His associate was ex-Secretary of State William M. Evarts. The Supreme Court and the Court of Appeals sustained Judge Paine's decision. Mr. Arthur was a delegate to the convention at Saratoga that founded the Republican party. Previous to the outbreak of the war he was Judge Advocate of the Second Brigade of the State Militia, and Governor Edwin D. Morgan, soon after his inauguration, on January 1st, 1861, appointed him Engineer-in-Chief of his staff. In the same year he held the post of Inspector-General, and soon afterwards was advanced to Quartermaster-General, which position he held until the expiration of Governor Morgan's term of office. He then resumed the practice of law, and not long afterwards was appointed counsel to the Tax Commissioners of this city at a salary of \$10,000 per annum. During then into politics he contributed largely by his efforts to the success of Mr. Tom. Murphy in a canvass for a State Senatorship. When Mr. Murphy resigned the Collectorship of the port in November 20th, 1871, President Grant appointed General Arthur to the vacant position, and four years later, when his term expired, re-nominated him. During President Hayes' Administration two special committees were appointed to make investigations into Collector Arthur's method of transacting business, and the result was that Mr. Arthur was removed on July 12th, 1876. He was succeeded by Collector Merrill. At the Chicago Republican Convention last year he was chosen the party candidate for the Vice-Presidency.

IDLENESS.

Idleness does more to reduce the average length of human life than the full normal exertion of one's industrial energies. In other words, more men women rust out than wear out. Ease and abundance of the good things of this life have apparently little influence in staying the hand of decay and death. If the mental and physical faculties are restrained by will or circumstances from useful employment. Care, also, as the proverb says, will kill a cat with its little fold hold on existence, popularly speaking. Lack of proper sanitary conditions appear to have less to do in narrowing the space between the cradle and the grave than worry and the intense, mischievous reactions caused by attempts to ease the burdens of life by mental or physical stimulation. These general statements have received abundant confirmation from the statistics lately compiled by Dr. U. F. Kolb. Occasionally he pushes his conclusions too far, however. He seems to think that infant mortality, for example, could be reduced if mothers would suckle their own children, and in support of this he says that out of 100 children suckled by their mothers only 18 2 died during the first year, of those nursed by wet nurses, 29.33 died, of those artificially fed, 50 died; of those brought up in institutions, 80 died. But all mothers cannot yield the necessary food for their offspring, and the weakness which underlies this incapacity is far more likely than not to be transmitted to most of the little ones, however carefully fed otherwise, who slip away into premature graves. As a rule, the death rate of institutions is far too high, and with proper sympathetic, enthusiastic and vigilant supervision it can be reduced very considerably, as the gratifying experience of the management of infant asylums in and near New York sufficiently prove.

NAPANEE BLANKET MILLS

Special to the Trade: Constantly on hand WHITE BLANKETS, SHANTY BLANKETS, HORSE BLANKETS ETC. ETC., ETC. HAVING SPECIAL FACILITIES for the manufacture of Every Description of Blanket. I am prepared to offer at a VERY LOW FIGURE. Arthur Toomey, NAPANEE.

METAL & RUBBER STAMPS Kenyon-Stewart Mfg. Co. Manufacturers of the largest variety of Patent Office, Railway and Business Stamp Metal in Canada. Awarded Bronze Medal at Toronto Industrial Exhibition, 1880. 38 KING STREET WEST, TORONTO.

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APPLE PAVERS, LOG BEATERS, SADDLERS, LAWN MOWERS, PRUNING KNIVES, ETC. To the trade only. Send for Price List and Quotations. GUELPH, ONT., CANADA. Brayley & Dempster, MANUFACTURERS OF Wrought Iron and Saddlery Hardware. Send and Strap Hinges a Specialty. 47 and 49 KING WILLIAM ST. HAMILTON, ONT., CANADA. (1881)

S. Lennard & Sons MANUFACTURERS OF PLAIN & FANCY HOSIERY. To the Wholesale Trade only DUNDAS, ONT. GRAND

Provincial Exhibition, Exhibition Grounds, MOUNT ROYAL AVENUE, MONTREAL, AGRICULTURAL, HORTICULTURAL and INDUSTRIAL. WEDNESDAY, September 14th, FRIDAY, September 23rd. \$25,000 OFFERED IN PREMIUMS: Entries in all departments must be filed with the Secretaries in Montreal not later than FRIDAY, September 14th. Price Lists and Forms of Entry, with any other information required, can be obtained on application to G. O. LECHE, Secretary Council of Agriculture, S. C. STEVENSON, Secretary Council of Arts and Manufacture.

WM. NORRIS & SON, MANUFACTURERS OF

PIANO STOOLS EMBROIDERED AND TAMBOURED PIANO COVERS. No. 8 ADELAIDE ST. EAST, TORONTO.

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R. H. Smith & Co. (Successors to J. FLIND) Sole Manufacturers in the Province of Canada of the 'SIMONDS' SAWS ST. CATHARINES, ONT. Sole Manufacturers of the genuine DANLAN, IMPROVED DIAMOND, IMPROVED CHAMPION, and the NEW IMPROVED CHAMPION CROSS-CUT SAWS. We also make all other kinds of Cross-Cut Saws. Hand saws from the cheapest to the very best. THE LARGEST SAW WORKS IN CANADA



interplan after the start of the...

The steel trade was in port...

THE METAL TRADE.

THE BRITISH MARKETS

Of American Manufacture... The adverse weather with which...

The Scotch pig iron trade has shown...

The manufactured iron trade is steady...

One of the largest firms in the Sheffield...

Steel shear makers... A change for the worse has come over the...

Complaints... The demand on home account...

The Birmingham... evidence they speak of a falling...

In the export department there is a...

The month's work alone... away last week 5000 tons of iron...

Old iron rails are making a bit of a...

THE LONDON MARKET

The following were the closing prices...

Table with columns for Iron, Bessemer, and other metal products with prices.

Table with columns for Bessemer rails and other products.

Table with columns for Bessemer rails and other products.

PHILADELPHIA MARKET

Importation of Iron Begun--Probable Consequences.

Philadelphia, 20th Sept.—At last it seems as though an importation of iron...

POSTAL TIME TABLE.



POST OFFICE, OTTAWA.

ARRIVAL AND DEPARTURE OF MAILES

Table listing arrival and departure of mails to various locations like Montreal, Quebec, etc.

Registered matter must be posted half an hour previously.

Office hours from 8 a.m. to 4 p.m.

H. P. BAKER, Postmaster.

It is probable a demand from this side will strengthen that tendency...

At the present time there is a... demand from this side will strengthen...

To-day's quotations are as follows—No. 1 pig iron, \$25, special brands...

The ship yards are using up iron very rapidly, and locomotive works...

Weight pipe was never in more active demand... The influx of gold continues...

POSTAL TIME TABLES.

POST OFFICE, MONTREAL.

Montreal, July 1890.

MAILS.

ONTARIO & WESTERN PROVINCES

Table listing mail services to Ontario and Western Provinces.

QUEBEC & EASTERN PROVINCES

Table listing mail services to Quebec and Eastern Provinces.

LOCAL MAILES

Table listing local mail services.

UNITED STATES

Table listing mail services to the United States.

GREAT BRITAIN, ETC.

Table listing mail services to Great Britain and other regions.

WEST INDIES

Table listing mail services to the West Indies.

GENERAL OFFICE

Table listing general office information.

POSTAL CAR LINE

Table listing postal car line services.

LOCAL TRAINS

Table listing local train services.

GENERAL OFFICE

Table listing general office information.

POSTAL CAR LINE

Table listing postal car line services.

LOCAL TRAINS

Table listing local train services.

GENERAL OFFICE

Table listing general office information.

RAILWAY TIME-TABLES.

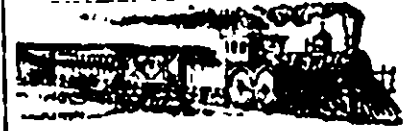


Canada Central Railway.

CHANGE OF TIME

On and after MONDAY, July 1st 1890.

Western Express... Trunk Railway... Express Train from Brockville...



ST. LAWRENCE & OTTAWA RAILWAY.

CHANGE OF TIME

On and after THURSDAY, July 1st 1890.

For the West... From both East and West... From the East, South and West...

Q. M. O. & O. RAILWAY.

CHANGE OF TIME.

COMMENCING on Wednesday, June 23rd 1890.

Table with columns for Mixed, Mail, and Express services, listing times and destinations.

[Local trains between Hull and Aylmer]

General Office, 13 Place d'Armes Square... L. A. SENECAL, General Superintendent.

INTERCOLONIAL RAILWAY.

SUMMER ARRANGEMENTS.

Commencing 14th June, 1890... Through Express Passenger Trains run daily.

Table listing summer arrangements for the Intercolonial Railway.

This train connects at Chaudiere Curve with Grand Trunk train leaving Montreal at 10 p.m.

For information in regard to passenger fares, tickets, rates of freight, train arrangements, etc., apply to CAPT. MACQUAIG, Sparks St., Ottawa.

D. POTTINGER, Chief Superintendent.

DOMINION TRADE REGISTER

INDUSTRIAL DIRECTORY. AGRICULTURAL IMPLEMENTS. WELLS & CO. MANUFACTURING CO. ANILINE DYES. BRASS WORKS. BRIDGE BUILDERS. CAPS AND TUBS. CARPETS. COCOAS AND CHOCOLATES. COTTON BAKERS. COTTON MILLS. ENGINEERS AND BOILERS. ENGRAVERS, ETC. FILES. FURNITURE. GLASSWARE. GLOVE MANUFACTURERS. Hammers. IRON WORKS. KNIFE WORKS. LASTS, BIES, ETC. LEATHER BELTING. LEATHER WORKS. MILLING MACHINES. PAPER MANUFACTURERS. SAW MANUFACTURERS. SEWING MACHINES, ETC. SCALES. SHOES. SPICES, ETC. STEREOTYPERS, ENGRAVERS, ETC. STOVES. TELEPHONES. TIERS. WIRE WORKS. WOODEN GOODS. WOOLLEN MANUFACTURERS. WOOLS AND COTTON WARPS.

ORGANS AND PIANOS. W.M. BELL & CO. DOLTON & SMITH. DANIEL HELL & CO. DOMINION ORGAN AND PIANO CO. S. R. WARREN & SON. W.M. NORRIS & SON. HEINTZMAN & CO. WOOD, POWELL & CO. PAPER MANUFACTURERS. CANADA PAPER CO. DOMINION PAPER CO. JOHN FISHER & SONS. LINCOLN PAPER MILLS CO. W.M. HARRER & BROS. SAW MANUFACTURERS. R. H. SMITH & CO. BIJURLY & DITRICH. SEWING MACHINES, ETC. W. WILKIE. SCALES. CANADA SCALE WORKS. C. WILSON & SON. HOWE SCALE CO. SPICES, ETC. R. D. VAN DE CARP & SON. STEREOTYPERS, ENGRAVERS, ETC. F. DIVER & CO. STOVES. W.M. CLENDENNING. TELEPHONES. HOLT TELEPHONE CO. TIERS. BITTER & CHERRIERS. WIRE WORKS. B. GREENING & CO. MAJOR & GIBB. TIMOTHY GREENING & SONS. WOODEN GOODS. C. T. BRANDON & CO. J. R. MCCLAREN. WOOLLEN MANUFACTURERS. J. ROUTH & CO. JOHN WARDLAW. WOOLS AND COTTON WARPS. WINANS & CO.

PETROLEUM.

CANADIAN MARKET. (Petroleum Advertiser) The market for crude is this morning \$2.00 in tank, firm. Not many sales are made, but a great activity is manifested by the bears to keep the price below \$2. This they would be able to accomplish, as the price is bound to go up in spite of all they can do to prevent it. We predict crude to reach \$2.50 by the 1st of November. Refined continues to hold its own at 19 1/2 to 20c cash, with rather an upward tendency, and we expect before next issue to see at least 21 cents paid. The market here for crude oil, by the carload, is from \$1.95 to \$2.00 per barrel f.o.b. The price obtainable for the crude oil or warehouse receipts issued by the different Pipe Line Companies, at Petrolia, Ont., including the pipeline charges of from 2c to 4c per barrel, according to the distance of the producers' well from the shipping tanks at the railway, is \$1.98 in tank. The price of American crude oil in the various producing districts of Oil City, Parker, Titusville and Bradford, by the latest quotations, is 97 1/2 to \$1 per barrel in tanks at the wells for United Pipe Line crude oil certificates—to this price has to be added the pipeline charges of 20c per barrel for pumping on board the cars. When a producer has his own pipe line he obtains from 100 to 200 per cent more for his oil than the price at the wells, but he does not get the advantage of a certificate in case he wishes to hold his oil for a rise and get money advanced on it. REFINED OIL MARKET. Petrolia, (Ont.)... \$0.19 @ 00 per gall. cash. London... 0.20 @ 00 Toronto... 0.21 @ 00 Ottawa... 0.22 @ 00 Montreal, (P. Q.)... 0.23 @ 00 Quebec... 0.24 @ 00 Halifax... 0.25 @ 00 St. John's... 0.26 @ 00 The above are wholesale prices per Imperial gallon at which refined oil is sold by the car load; the price per single barrel is generally from 1c to 2c above these figures. The latest refined oil quotations in New York market are as follows:— Cargo lots for export, 110° burning test by the Saybold tester, 8 1/2c per wine gallon. Refined oil for the New York City trade, in lots of 50 to 100 barrels, 100° flash test by the Tagliabue pyrometer, 9 1/2c per wine gallon. Refined oil of 150° burning test, prime white, 100 to 10 1/2c per wine gallon; water white 11 1/2 to 14c per wine gallon, according to brand. This is the kind of American oil usually purchased for the Canadian market, and is coming into general use in the United States. Cases of refined oil for export, 110° burning test, cargo lots, 11 1/2 to 12c, according to brand. PETROLEUM PRODUCTS. Lubricating... \$2.00 @ \$1.00 per 100 lb. Gasoline... 0.12 @ 0.15 per gal. Oil—32°-37° grav... 0.22 @ 0.23 Paraffin Candles... 0.18 @ 0.20 per lb. Wax... 0.08 @ 0.10 LOCOMOTIVE SMOKE CONSUMING APPARATUS. The great destruction by fire of fencing, grass and hay stacks, bridges, and even depots by locomotives, consequent on the long drought, has become alarming to railroad men. Said improvement relates to causing locomotives and fire and portable or stationary engines to consume their own smoke, and it consists in placing on the top of the stack or chimney a valve or damper which can be shifted so as to open or close the entrance to the pipe which connects with the ash pit, whereby the products of combustion can be turned directly into the pipe and be conveyed back into the furnace or can be turned into the open air. Scientists claim that 80 per cent. of the very best part of fuel passes out of the stack in the present wasteful practice. This improvement further consists of extending the ash pits in locomotives underneath their axles to the front of the boiler, or a little beyond, with an adjustable valve in the mouth of same under the control of the engineer and moves the headlight forward so as to permit a return flow from the top of the chimney to pass down and connect with the extended ash pit. The damper on the top of the chimney being under control of the engineer, is kept open when the engine is standing still, but when the engine is in motion the closing of the damper on the top of the chimney will cause the exhaust steam in the chimney to force the smoke, cinders, etc., down the return flue into the mouth of the extended ash pit, whose adjustable valve will admit a blast of fresh air, consequent on the advancing train, and commingles with and forces the smoke, etc., back along the extended ash pit and into the furnace, thus supplying the necessary oxygen mingled with the gases of combustion to the fire, where they are consumed and constitute a great economy of fuel and safety from external fires, as well as comfort to passengers. Should it be desired to increase the amount of combustible matter there may be introduced under or into the furnace, it is to mingle with the products of combustion, vaporized oil or similar substances, which can be

THE MONEY MARKET.

TORONTO STOCK REPORT. Table with columns: BANKS, CAPITAL SUBSCRIBED, CAPITAL PAID UP, REST, DIVIDEND LAST 6 MONTHS, CLOSING PRICES. Includes entries for Canadian Bank of Commerce, Dominion Bank, Toronto Bank, etc.

DEBENTURES, ETC. Table with columns: DEBENTURES, INTEREST PAYABLE, WHERE PAYABLE. Includes Dominion Gov't stock, Toronto & Nipissing bonds, etc.

MONTREAL STOCK REPORT.

Table with columns: NAME, CAPITAL SUBSCRIBED, CAPITAL PAID UP, REST, DIVIDEND LAST 6 MONTHS, CLOSING PRICES. Includes British North America, Canadian Bank of Commerce, etc.

CASTORINE OIL MACHINE. ASTORINE OIL CO. THOMAS WILSON, Dundas, Ont. Manufacturer of STATIONARY and PORTABLE Steam Engines, BOILERS AND MACHINERY of every description. COTTON MILL CALENDERS, HOSIERY STEAM PRESSERS, PROPPELLER WHEELS, ALL SIZES.

venturized by passing live or exhaust steam through the same, or fed into the furnace in any other suitable manner. This improvement is the invention of John McMurtry, Lexington, Ky., who has had his application (substantially) before the patent office since 1868—Cincinnati Inquirer. According to a French journal the construction of Faure's secondary battery for storing electricity is as follows:—Two sheets of lead are taken, 7.87 inches wide; one of these plates are 23.62 inches long and forty inches thick. Each plate is covered on both faces with a layer of red lead, reduced to a paste by water, 1.76 pounds being spread over the larger plate, and 1.54 pounds over the smaller. On each face a sheet of parchment paper is placed, and the whole introduced into a sheath of thin leather. The plates are then placed one upon the other, with pieces of rubber between them, and rolled up, after which the whole is immersed in a lead cell, coated on the inside with red lead, and filled with a ten per cent. solution of sulphuric acid. When charged the apparatus weighs about 20 pounds. Mention was made recently of a new discovery in marine architecture by Prof. Raoul Pictet of Geneva who is now constructing a small steamer for a working model. Prof. Pictet expects that a vessel built on the principle which he has devised will draw less and less water as her speed increases, thus gliding over the water instead of pushing through it. The model which he is now building will be 51 1/2 ft long and 11 1/2 ft broad. She is expected to draw 13 in. and 18 in. at 10 and 15 miles an hour, respectively. The engine will be placed amidships, from which point to the stern the screw shaft and the steel form an inclined plane; the bows are long, tapering and wedge-shaped. The inventor expects to effect a great saving of fuel, believing that a steamer built on his plan can be kept at full speed with one-third of the expenditure of force with which it started. The trial trip will be made on Lake Geneva next November, and the model is expected to reach a speed of forty miles an hour. The Geneva correspondent of the London Times, who furnishes the above description, writes that Prof. Pictet's previous scientific achievements have been so remarkable that many people who cease to follow his reasoning have no hesitation in accepting his conclusions. Captain Richard Tecker, of Boston, invented an air propeller, on which he was experimenting with a view to taking the prize offered by the Erie Canal Company. They require a boat which will run by steam on the canal, without having a wake and raising waves which wash the banks. This boat is built like an old-fashioned scow, and is 51 ft long by 20 ft beam. She draws two feet of water amidships. The bottom is V shaped from stem to stern, and has five keels, aft of the center, running out to the stern. Forward of the stern the five keels extend seven and a half feet. On the forward deck is placed an upright, high pressure boiler of 15 horse-power. Just behind this is the engine, which has a large fly-wheel four feet in diameter. On deck is a large air chest extending almost across the bow, from the underside of which four square tubes run down perpendicular into the water. A large fan is placed directly downward into the water between the five keels. The propelling power is given to the boat simply by the air rushing between the keels and passing the water out at the stern. When in motion the air rushing out gives the boat the impetus of a stern-wheel propeller, although she leaves no perceptible wake. The boat easily makes five miles an hour.

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ALL KINDS OF YARNS, BEAVER WARPS, &  
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W. R. GRAY, Proprietor.  
MANUFACTURERS OF  
Card Clothing and Woollen Mill Supplies.

DANWELL HOUSE, COLBURN RD. This hotel is centrally situated in the town, next to the Court House, and is well fitted for the accommodation of tourists and travellers. Terms of payment on application. Sample Rooms.

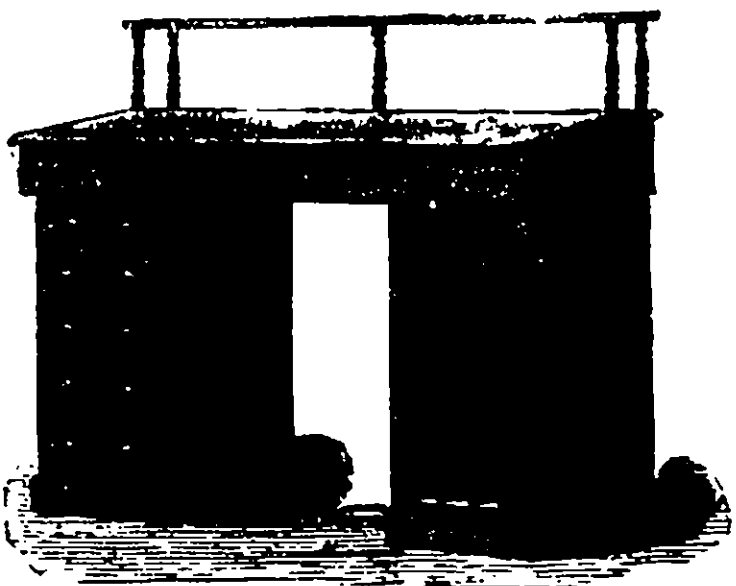
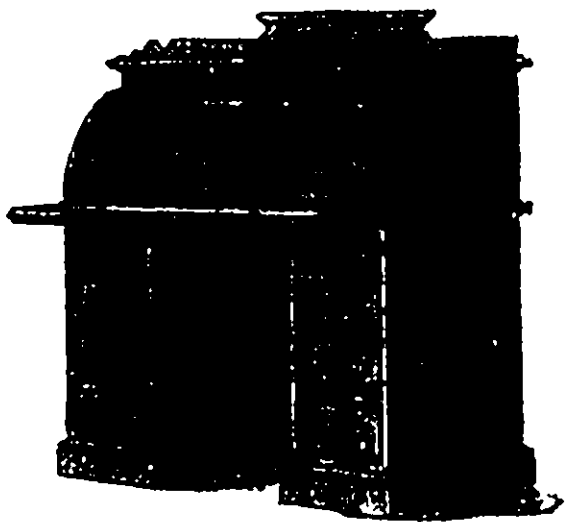
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**Marbleized Slate Works**  
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FACILE AND MARBLEIZED SLATE  
MANTELS.  
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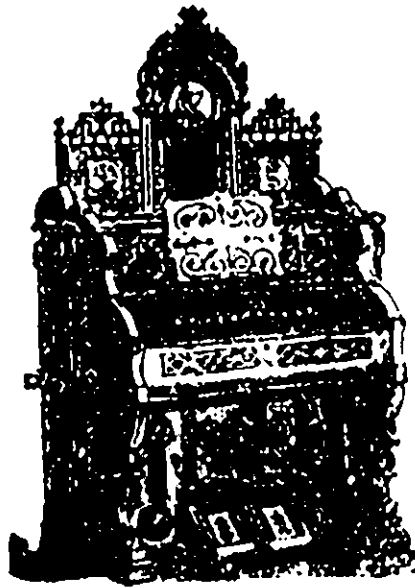
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THE PURE AND WHOLESOME SUMMER BEVERAGE.**

**PROF. CROFT'S ANALYSIS.**

I have examined it chemically, and find it exceedingly pure. I have no hesitation in certifying that it is as GOOD LAGER BEER AS I HAVE EVER TASTED, and that it is a PERFECTLY PURE and therefore WHOLESOME BEVERAGE.

The TRADE and FAMILIES supplied in Wood and Bottles.

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(NEARLY OPPOSITE THE ST. LAWRENCE MARKET),

**TORONTO, Ontario.**

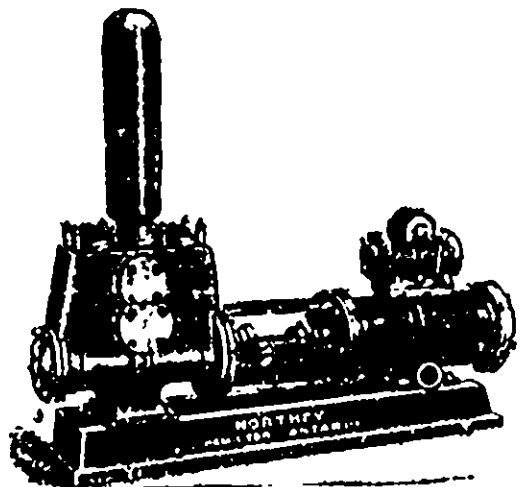
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FOR OIL PIPE LINES,  
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Were awarded the FIRST PRIZE for their LARDINE and other

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At the great Industrial Fair, Toronto, 1890, and

**Four First Prizes and Gold Medal**

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For the Lardine Machine Oil was used, by authority of the Association, on all the machinery at both Fairs during the above periods and proved a very superior oil.

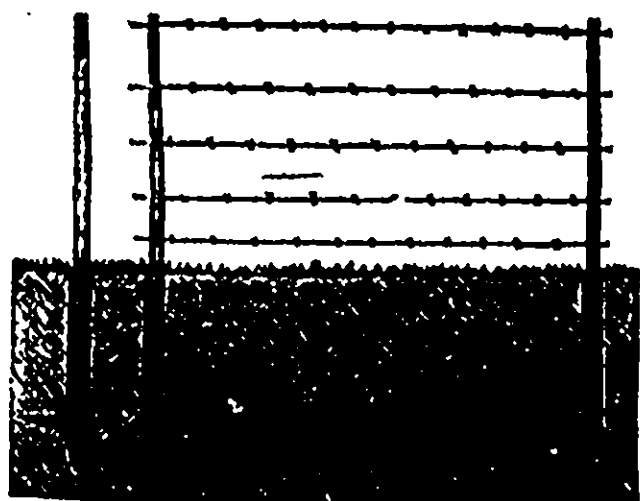
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For Barbed or other Wire  
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**BEST, CHEAPEST AND  
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FENCE POST ever invented  
or used, holds away with the  
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I will build Barbed Wire  
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**VERY LOW FIGURE.**

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Parties desirous of becoming  
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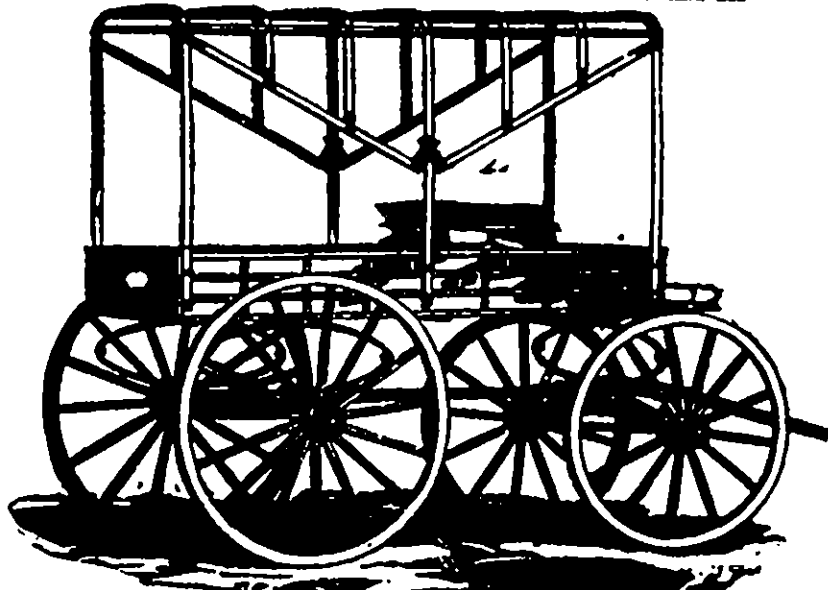
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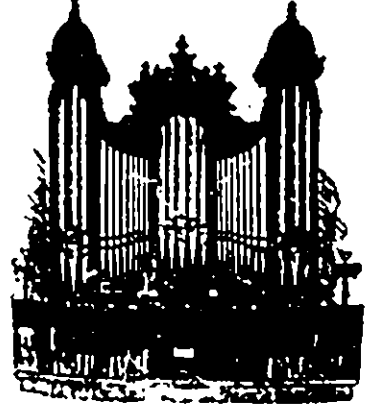
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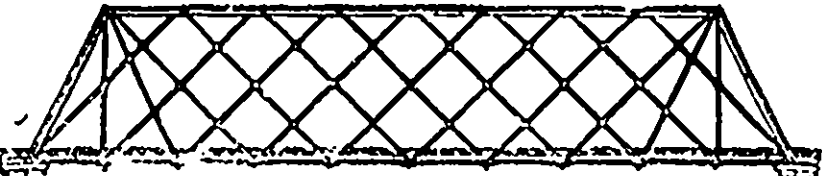
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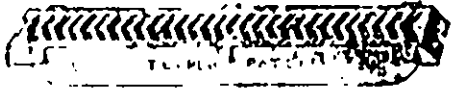
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